

## DOK Level 4: Extended Thinking: 5th Grade Example School Festival

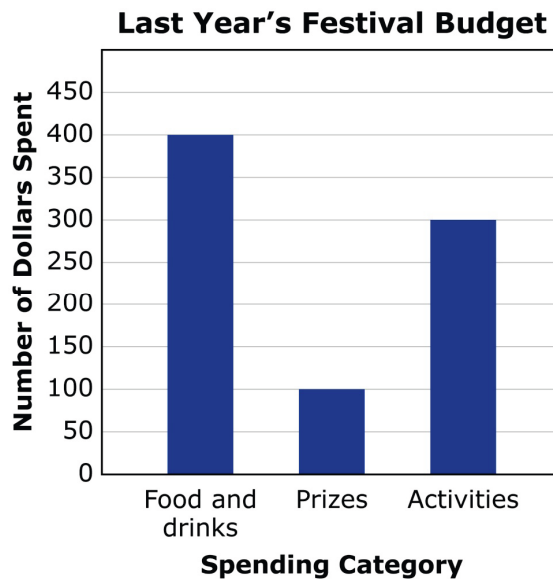
You serve on a committee that is in charge of planning a school festival. The following tasks need to be completed by committee members as part of the planning for the school festival.

- Determine the budget for the festival.
- Choose the food and drinks for the festival.
- Determine amounts of supplies for making a dessert.
- Make a schedule of the different activities.
- Make some decisions on the games and prizes used during the festival.

### ***Part A***

Your first task is to determine how much money to spend on food and drinks, prizes, and activities.

This graph shows how last year's budget of \$800 was spent.



This year's budget has been increased to \$1600. The fraction of the money used for each spending category should be the same as the fraction of the money used for each category last year.

Write a summary of the changes to the budget. The summary must include—

- a bar graph showing the dollar amounts that will be spent in each category (be sure to include a title and labels)
- a description of the steps used to find each dollar amount shown in the bar graph

## DOK Level 4: Extended Thinking: 5th Grade Example

### Part B

#### Food and Drinks

Your next task is to make decisions about the food and drinks that will be available at the festival. You need to determine the amount of food, drinks, plates, cups, and utensils that will be available for the people who attend the festival. You must also decide which types of food and drinks you will provide.

There are 75 students who will attend the festival. Each student will bring 1 guest to the festival. A total of 50 teacher and community members will also attend the festival.

The table that follows shows the amounts charged for different foods and drinks by two different restaurants.

	<b>Restaurant A</b>	<b>Restaurant B</b>
<b>Taco Meals</b>	\$4 per person	\$4 per person
<b>Hamburger Meals</b>	\$5 per person	\$3 per person
<b>Lemonade</b>	Free	\$75 for every 100 people
<b>Water</b>	Free	\$50 for every 100 people
<b>Plates, Cups, and Utensils</b>	Free	Free

Guidelines:

- You must choose 1 restaurant to provide the food and drinks for the festival. You must also choose 1 meal type.
- You may choose 1 or 2 drinks.
- You must make sure you have enough money in your budget for the choices you make.

The principal of the school needs to approve all committee decisions. Write a note to the principal that identifies the restaurant you have chosen and clearly explains why the restaurant is the better value. Your note should include—

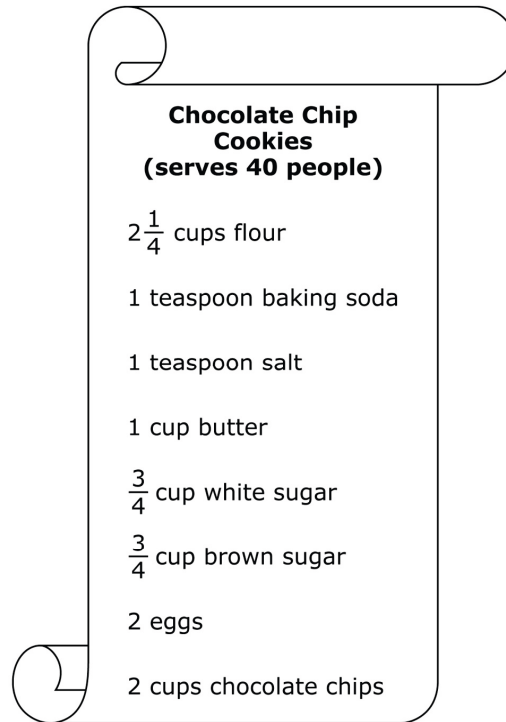
- the total number of people attending the festival
- the calculated price for using that restaurant and how that price was calculated
- how you determined that the restaurant you chose was the better value.

## DOK Level 4: Extended Thinking: 5th Grade Example

### Part C

### Make the Dessert

Parents have volunteered to provide cookies for the festival. One parent will buy the ingredients and then bake the cookies. The parent wants to be sure she has enough of each ingredient available to make cookies for all participants. The parent asks you to determine the amount needed for each item in the recipe shown below.



**Chocolate Chip Cookies**  
**(serves 40 people)**

$2\frac{1}{4}$  cups flour

1 teaspoon baking soda

1 teaspoon salt

1 cup butter

$\frac{3}{4}$  cup white sugar

$\frac{3}{4}$  cup brown sugar

2 eggs

2 cups chocolate chips

Fill in the list below with the amount needed for each item. Remember to think about the total number of people who will attend the festival.

Item Amounts
_____ cups flour
_____ teaspoons baking soda
_____ teaspoons salt
_____ cups butter
_____ cups white sugar
_____ cups brown sugar
_____ eggs
_____ cups chocolate chips

Use the space below to show or explain in words how you calculated the amount of flour needed.

Use the space below to show or explain in words how you calculated the amount of brown sugar needed.

## DOK Level 4: Extended Thinking: 5th Grade Example

### Part D

#### Schedule of Activities

The school festival will start at 11:00 A.M. on Saturday. The list below shows the amounts of time each activity should last.

Presentation by principal: 30 minutes

- Lunch: hours 1½
- Student and teacher basketball game: 1 hour
- Band performance: 30 minutes
- Games for prizes: 2 hours
- Break: 15 minutes

Finish filling out the schedule below so there are no gaps in time. Also, none of the activities can happen at the same time

Activity	Start Time	End Time
Presentation by principal	11:00 A.M.	
Lunch		
Student and teacher basketball game		
Break		
Band performance		
Break		
Games for prizes		

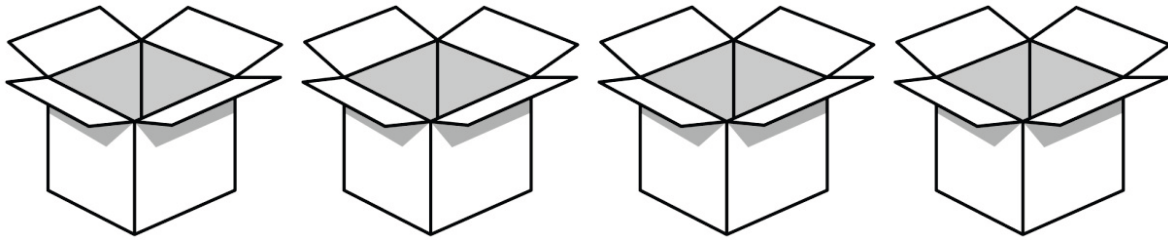
## DOK Level 4: Extended Thinking: 5th Grade Example

### Part E

#### Games and Prizes

Each time a student wins a game, he or she will get a prize. You will use the money in your budget to buy 4 boxes of prizes. You will spend the same amount of money on each box of prizes.

Attach a price tag to each box below to show the amount of money you will spend to buy the prizes in it.



Show the steps used or explain how you found the price for each box of prizes in the space below.

Each box contains 90 prizes. The prizes will be split evenly among the 3 games. The names of the three games students will be able to play for prizes are shown below.

1. Fishing for Sharks
2. Pie the Teacher
3. Frog Jumping

Draw a model below to show both the number of boxes and the number of prizes that will be used for each game. Be sure to label what each part represents.